

198195

JPRS-TTP-86-009

11 APRIL 1986

19981211 055

## Worldwide Report

# TELECOMMUNICATIONS POLICY, RESEARCH, AND DEVELOPMENT

DTIC QUALITY INSPECTED 2

Reproduced From  
Best Available Copy

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY  
NATIONAL TECHNICAL  
INFORMATION SERVICE  
U.S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA. 22161

3  
58  
A04

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

11 April 1986

# WORLDWIDE REPORT

## TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

### CONTENTS

#### ASIA

##### HONG KONG

Broadcasting Review Board Proposals Meet Criticism (Hong Kong SOUTH CHINA MORNING POST, 19 Feb 86; Hong Kong HONGKONG STANDARD, 26 Feb 86) .....	1
Advertisers' Views, by Peter Robinson	1
Asia TV's Position	2
Satellite TV Reception Hitting Government Snags (Shirley Hui; Hong Kong HONGKONG STANDARD, 18 Feb 86) ..	3

##### JAPAN

Briefs	
Loan to Jordan	4

##### PEOPLE'S REPUBLIC OF CHINA

New Type Microwave FM Oscillator (Lin Fuhua, Zhuang Kunjie; Nanjing NANJING GONGXUEYUAN XUEBAO, No 1, 20 Jan 86) .....	5
Xian Astronautical Center Tracks Satellite (Beijing Domestic Service, 20 Feb 86) .....	7
Telecommunications Satellite Successfully Positioned in Orbit (Beijing ZHONGGUO XINWEN SHE, 20 Feb 86) .....	10

China's Satellite Tracking, Control Improved (Beijing XINHUA, 7 Mar 86) .....	11
Fujian Builds Two Major Telecommunications Circuits (Beijing ZHONGGUO XINWEN SHE, 7 Mar 86) .....	12
Xizang's First Stage of Lhasa Satellite Ground Station Completed (Xizang Regional Service, 7 Mar 86) .....	13
Briefs	
Shanxi Broadcasting, Television Forum	14
Provinces Programs Via Satellite	14
Hebei Radio-Television Expansion	15
Harbin, Edmonton Telecommunications Pact	15
Urumqi Satellite Ground Station	15
Shanghai International Phone Increase	15
Beijing-Xizang Satellite Telephone	16

#### LATIN AMERICA

##### ARGENTINA

Briefs	
Telecommunications Cooperation Agreement	17

##### GRENADA

Briefs	
First TV Transmission	18

#### SUB-SAHARAN AFRICA

##### GAMBIA

Africa's Only Private Radio Station Continues Operations (Dakar AFRICA, Nov 85) .....	19
--	----

##### UGANDA

Briefs	
Japanese Aid for TV	21

#### WEST EUROPE

##### FEDERAL REPUBLIC OF GERMANY

Nixdorf's Plans for Supplying ISDN Equipment (R. Schulze; Duesseldorf VDI NACHRICHTEN, 27 Dec 85) .....	22
--	----

DBP ISDN Pilot Projects in 1986/87 in Stuttgart, Mannheim (R. Schulze; Duesseldorf VDI NACHRICHTEN, 10 Jan 86) .....	26
Briefs	
FRG Cable Network Plans	28
FRANCE	
Francophone Summit Decisions on Telecommunications Detailed (Paris Diplomatic Information Service, 27 Feb 86) .....	29
New Organizations Proposed in Decree on PTT Reform (Paris ZERO UN INFORMATIQUE, 13 Jan 86) .....	32
Briefs	
SEP-Matra Joint Venture	34
CGCT Activity to Matra	34
First Private Commercial TV Network	35
ITALY	
Telettra Expands to U.S. (Rome LA REPUBBLICA, 11 Jan 86) .....	36
Stet, Montedison Form Televas To Expand Services (Milan COME - COMUNICAZIONE MONTEDISON, Nov 85) .....	37
SIP Adopts Packet Network (Rome L'UNITA, 8 Feb 86) .....	40
NORWAY	
Telecommunications Agency General Director Kjell Holler (Ole Johan Nilsen; Oslo AFTENPOSTEN, 8 Feb 86) .....	44
SPAIN	
Law Governing Private TV To Remain Unchanged (Francisco Virseda Interview; Madrid EL SOCIALISTA, 18 Jan 86) .....	49
SWITZERLAND	
Swiss PTT Considering Videotex, Rejecting French Minitel (Thierry Combe; Paris ZERO UN INFORMATIQUE, 10 Feb 86) ....	52

HONG KONG

## BROADCASTING REVIEW BOARD PROPOSALS MEET CRITICISM

### Advertisers' Views

Hong Kong SOUTH CHINA MORNING POST in English 19 Feb 86 Business News p 3

[Article by Peter Robinson]

[Excerpts]

Cable television should be introduced to cater to minority programming tastes and the Broadcasting Review Board's recommendations to give RTHK prime time on the existing networks scrapped.

This view was expressed yesterday by Mr Jim Bell, vice-chairman of the Association of Accredited Advertising Agents (4 As).

Mr Bell said after a speech to the Hongkong Management Association's Sales Marketing Executives' Club on the impact of the BRB report that its recommendations were "a recipe for disaster."

He said a cable television channel could cater to minority tastes, leaving TVB and ATV free to seek the largest possible audience to attract advertisers.

Hongkong Telephone is considering providing a cable television channel with a joint venture partner providing the programming skills but is waiting to hear the Government's response to the BRB report.

Mr Bell said the 4 As is continuing to make representations to the Legislative Council against the report.

He said if the recommendation is implemented, the Government might find no companies seeking licences after 1988.

The report, he claimed, recommends a bigger role for RTHK without saying how a commercially-run RTHK could be viable.

Mr Bell claimed the compilers of the report "lacked professional knowledge of the industry."

"If these recommendations are implemented, we foresee the stagnation and perhaps demise of TV broadcasting as we know it in Hongkong," he said.

He said broadcasting frequencies after 1997 is another matter which should be addressed now.

He said representatives of the Hongkong and Chinese Governments must meet to agree on mutually suitable frequencies.

In his speech, Mr Bell advocated the cause of laissez-faire in the television market.

He said: "The BRB appears to feel that the public is in need of education about what TV they should watch."

11 April 1986

"This is a dangerous and outrageous statement for a Government-appointed committee to make, especially in the context of Hongkong, where freedom of speech and freedom of choice are fundamental to the territory's future."

He said a 1983 study of the television audience by the Census and Statistics Department showed that only 18 per cent said they wanted to enrich their knowledge by watching television.

Sixty-one per cent said they watched television to pass their spare time and 50 per cent said they watched for entertainment.

Mr Bell said Hongkong must be the only place in the world that provides two chan-

nels catering to a population that accounts for only three per cent of the total.

Other observers have pointed out, however, that the majority of viewers of the English stations are bilingual.

Mr Bell did not appear to think the companies should plough back their profits from the Chinese channels into making more programmes for the English channels.

Giving RTHK 20 hours per month of prime time from each Chinese channel would cost \$40 million to \$100 million a year, he claimed.

It would also make it difficult for ATV and TVB to ensure the continuity in programming which advertisers seek.

He said reducing the licensing period from 15 to eight years will make companies shy off applying for licences since high capital investment in technology requires long-term payback.

A reduction in franchise terms could also lead to a reluctance to invest, lowering programme standards.

The BRB report has recommended two separate bodies to monitor broadcasting but Mr Bell said the Television and Entertainment Licensing Authority has successfully carried out this function in the past.

He said over the past 18 months the 4 As has spent over \$150,000 on improving voluntary codes of advertising practices.

### Asia TV's Position

Hong Kong HONGKONG STANDARD in English 26 Feb 86 p 2

[Excerpts]

TOP executives of Asia Television yesterday rejected all major recommendations of the Broadcasting Review Board, saying that the status quo should be maintained.

The seven-member team, led by the chairman of ATV, Mr Deacon Chiu, met members of the Legislative Council ad hoc group on the BRB report yesterday.

In their submission, Mr Chiu said the recommendation that prime-time slots of the two commercial television stations be allocated for broadcasting programmes of Radio Television Hong Kong (RTHK)

would have "a considerable effect on the viewing pattern (of viewers) for the rest of the evening."

"And if the public broadcasting service is to slot a particular weak programme on one channel, the financial loss for that channel would be drastic," he added.

Mr Chiu also said the alternative suggestion — that on weekends, airtime on both Chinese channels be allocated to RTHK — is "unworkable."

The team also rejected the recommendation that two separate bodies be set up to take over the administration and jurisdiction power of the present Commissioner for Television and Entertainment Licensing.

"The present system works well, and we doubt if the proposed Broadcasting Authority and Radio Television Complaints Tribunal will work," said Mr Chiu.

Meanwhile, 44 social organisations jointly issued a press release to protest against the suggestions of the BRB.

They said the recommendations, if implemented, would infringe on the people's rights.

The freedom to choose programmes will be infringed on if prime airtime is allocated solely to RTHK, they explained.

"The associations urge the Government to give careful consideration to the recommendations of the BRB so that the people's way of life may not be undesirably affected and their rights jeopardised," the press release stated.

/9317

CSO: 5540/048

HONG KONG

# SATELLITE TV RECEPTION HITTING GOVERNMENT SNAGS

Hong Kong HONGKONG STANDARD in English 18 Feb 86 p 1

[Article by Shirley Hui]

[Text]

SEVERAL local hotels have gone ahead with plans to bring international television to their guests via satellite.

If successful, Hongkong people could watch foreign programmes free.

Present telecommunication regulations allow an individual to pick up any station he wants — but he can only use the satellite dish for his TV only.

A person who picks up signals with a giant dish and distributes it to others would be violating the law.

Dishes which can pick up satellite programmes have been installed by the newly-opened Kowloon Hotel on the roof of its sister hotel, the Peninsula.

Sources told *The Standard* that other hotels have also installed dishes while some were in the process of doing so. This, however, could not be confirmed.

A government spokesman told *The Standard* yesterday that an exclusive licence has been granted to Cable and Wireless for the transmission of television programmes to and from Hongkong "except when the Governor-in-Council directs otherwise".

The General Manager of the Kowloon Hotel, Mr Frank Kam, said their legal advisers were studying the matter and would discuss it with the government soon.

"The world is getting smaller. Our service is planned to meet the needs of travelling businessmen who want

to know what is happening around the world as soon as possible," he said.

But the government had another view: "The use of a satellite dish for the reception of satellite television signals for distribution to more than one television receiver — whether it is for commercial resale or otherwise — is considered to be within the scope of the exclusive services provided by Cable and Wireless (Hongkong) Limited."

The Post Office therefore, would not grant any satellite signal distribution licence to companies and organisations other than Cable and Wireless unless so directed by the Governor-in-Council.

Hongkong also comes under the International Telecommunication Satellite Organisation (INTELSAT) Agreement, of which Britain is a signatory. Intelsat prohibits such distribution.

"Under the agreement, all earth stations and other satellite dish aeri-als accessing the system must be approved in advance by Intelsat," the spokesman said.

The Sales Administration Manager of Cable and Wireless, Mr Mark Kwong-jim, said local people could have access to the satellite — on the condition that they pay \$85 per minute for using their facilities.

But clients would have to find their own facilities for a microwave link from C&W's New Mercury House's international television centre to their sets.

/9317

CSO: 5540/048



JAPAN

BRIEFS

LOAN TO JORDAN--Tokyo, March 7 KYODO--Japan will extend to Jordan a soft-term loan of up to 578 million yen to help finance a telephone network expansion project, the Foreign Ministry said Friday. The ODA (Official Development Assistance) loan, to be made available from the Overseas Economic Cooperation Fund to the Jordanian Government, will carry an annual interest rate of 5.5 percent, and is repayable in 25 years, including a seven-year grace period. With the new credit, the accumulated total of ODA loans extended to Jordan since 1974 comes to 45,785 million yen, it said. Notes for the latest loan were exchanged between the two governments in Amman Thursday, the ministry said. [Text] [Tokyo KYODO in English 0648 GMT 7 Mar 86 OW] /6091

CSO: 5560/123

PEOPLE'S REPUBLIC OF CHINA

#### NEW TYPE MICROWAVE FM OSCILLATOR

Nanjing NANJING GONGXUEYUAN XUEBAO [JOURNAL OF NANJING INSTITUTE OF TECHNOLOGY]  
in Chinese Vol 16 No 1, 20 Jan 86 pp 61-70

[Article by Lin Fuhua [2651 4395 5478] and Zhuang Kunjie [8369 2492 2638] of  
the Department of Radio Engineering, Nanjing Institute of Technology]

[Summary] A new type of oscillator using multilink feedback loop is presented. High stability of frequency can be obtained, because the total time delay of the oscillator loop is larger, and it is slightly influenced by the noise or the parameter drift of the transistor either of which being the chief factor affecting the short-term stability. In order to achieve linear FM, a linear voltage controlled phase shifter must be involved in the loop. The greater the shift of the VCPS, the greater is the frequency shift of the VCO. An engineering design method of the linear FM oscillators is given. A variety of FM integrated microwave sources has been produced and applied to the microwave communication systems and broadcasting satellite receivers. [Paper received 21 December 1984.]

#### References:

1. Rippy, R., "A New Look at Source Stability," MICROWAVES, Vol 15 No 8, August 1976 pp 42-48.
2. "Advanced SAW Oscillator Investigation," AD A040436, April 1977.
3. Lin Fuhua and Zhuang Kunjie, "On Performances of a Branching Filter With Microwave Directional Couplers," TONGXIN XUEBAO [JOURNAL OF CHINA INSTITUTE OF COMMUNICATIONS] No 2, 1985.
4. Rippy, R., "Wideband Phase Modulator Works Directly on Carrier," MICROWAVES, Vol 14 No 1, January 1975 pp 52-58.
5. Garver, V., "360° Varactor Linear Phase Modulator," IEEE, MTT-S, Vol 17 No 3, March 1969 pp 137-146.
6. Lesson, D.B., "Short-term Stable Microwave Sources," MICROWAVE JOURNAL, June 1970 pp 59-69.

7. Cheng Qun [2052 5028], "Measuring Methods and Testing Equipment for the Communications Frequency Source Short-term Stability," GUOWEI DIANZI JISHU [ELECTRONIC TECHNOLOGY FROM ABROAD], No 10, 1977.
8. Zhuang Kunjie and Lin Fuhua, "Cordwood Microwave Systems and Integrated Functional Modules," TONGXIN XUEBAO [JOURNAL OF CHINA INSTITUTE OF COMMUNICATIONS], No 4, 1983.

/9365

CSO: 5500/4149

PEOPLE'S REPUBLIC OF CHINA

XIAN ASTRONAUTICAL CENTER TRACKS SATELLITE

OW230224 Beijing Domestic Service in Mandarin 2335 GMT 20 Feb 86

[From the "People's Soldiers" program: report entitled "We Have the Courage To Hang a Pearl in Space" by station reporter Zhou Yuchun and station correspondents Sun Lei and Jiang Weisen from the Xian Astronautical Measuring and Control Center]

[Excerpts] [Unidentified reporter] Listeners, I am reporting to you from the command hall of the Xian Astronautical Measuring and Control Center on the positioning of China's telecommunications and broadcasting satellite in near-synchronous orbit. The hall is located at the center's computing and command building [words indistinct] where there are dozens of control rooms with some 100 pieces of modern equipment for measuring, controlling, computing, analyzing, and telecommunications. Inside the spacious and brightly illuminated hall are more than 30 screens and automatic recording equipment.

Today is 3 February. The posts in the hall are now fully manned by command personnel, experts, scientists, and technicians who are in charge of this measuring and controlling mission. Constantly displayed on the screens are color pictures and large amounts of measuring data.

[Reporter] Watching the positioning of the satellite into near-synchronous orbit at the center today are Li Peng, member of the Political Bureau and Secretariat of the CPC Central Committee and vice premier of the State Council, and leading comrades of the Ministry of Astronautics Industry, the State Scientific and Technological Commission, and Shaanxi Province.

Listeners, the satellite is now operating [words indistinct] in the gradient orbit [po du gui dao], or the big elliptical orbit. At this stage, the measuring and control systems constantly (?monitor and) control the satellite's position, orbit, and equipment functions. We can see now that the center has been receiving a large quantity of data and information sent back from China's ocean-going survey fleets and tracking stations all over the country, and this data is constantly processed by computers operated by experts and scientists here.

Listeners, it is now exactly 1000 [0200 GMT]. The satellite apogee engine will be ignited in a few minutes. After ignition, the satellite will be pushed from its equatorial orbit to the near-synchronous orbit. During these few minutes, (Jin Lei), a staff member of the Xian Astronautics Measuring and Control Center, will give us a brief description of the center.

[Jin Lei] Currently, our center not only has precision tracking and surveying, remote measuring, control and data processing systems, but it also has a complete astronomical measuring and control system with time-synchronized screens, data-transmitters, command [words indistinct], computers [words indistinct] and weather forecasting systems. We are glad to tell you listeners that our center now has some 1,000 experts, scientists, and technicians. The many measuring and control stations in various parts of the country have formed a preliminary measuring and control network centered on data processing. In terms of the degree of automation, the entire measuring and control process has reached advanced world levels. After the satellite separated from the carrier rocket, our center has been constantly tracking, measuring, and computing its position. Before reaching its fourth apogee--in other words, before it is ignited in space--our center has been constantly monitoring the operation of the satellite's equipment and made precision adjustments to ensure that absolutely nothing will go wrong when it is ignited. We can see from the screens that the satellite is in its best position to be ignited in space.

[Reporter] Listeners, the ignition in space is a success! The ignition in space is a success! The satellite engine was ignited 36,000 km--I repeat, 36,000 km--above the earth. We can now see a red line appearing on the automatic recording equipment. This red line, which continues to extend along the satellite's precomputed theoretical orbit, is the orbit of the satellite after being ignited.

[Unidentified female report] The satellite has now entered near-synchronous orbit from its gradient orbit above the equator at 141 degrees east longitude. This shows that our country's telecommunications and broadcasting satellite has been successfully positioned at a place above the equator. Its orbit is almost (?synchronous) with the equator.

[Unidentified male reporter] Vice Premier Li Peng and leading comrades of departments concerned watching today's ignition in space repeatedly congratulated the controllers. The vice premier stood up with delight from his seat and made a heart-warming speech.

[Begin Li's recorded remarks] Comrades: The satellite has now entered the near-synchronous orbit. This is a significant victory. [Sentence indistinct] I wish to congratulate you for your success and your hard work. [End Li's recorded speech] [applause]

[Unidentified reporter] Listeners: With me now at the command room of the center is Comrade (Qian Zhongsheng) who is in charge of the ignition of the

satellite in space. Comrade (Qian), the ignition of the satellite in space was well performed. Can you tell our listeners what did you do to accomplish the mission?

[Being (Qian's) recorded remarks] Our guidelines for accomplishing the mission are to ensure safety and reliability so that absolutely nothing can go wrong. These guidelines were laid down by the late Premier Zhou Enlai. To attain this goal, we have done three things: first, we have meticulously maintained all our equipment to make sure that they are always in good working condition. Our center has hundreds of thousands of component parts, and we have made sure that none of them will break down during the test. Second, we have practiced our operation through repeated drills. The test involved thousands upon thousands of movements, and we have made sure that no one movement will go wrong. Third, we have urged the technicians to recall and anticipate--recalling what sort of problems they had discovered in the process of preparing the test, and to anticipate what might go wrong during the test. To accomplish the mission, our comrades have displayed the self-sacrificing spirit. Some have postponed their marriage. Some have given up the opportunity for pursuing more advanced studies. Even those who are sick insisted on working although they have to receive medical injections and take medication. Many comrades have worked overtime, and they were absorbed in their work that they forgot to eat and sleep. We all are very happy for the successful ignition in space today because our toil and sweat have been rewarded. Our next project will be fix-point control. All our comrades in the center are determined to work hard to position the satellite at a fixed spot 36,000 km above the equator. [End (Qian's) recording]

/6662

CSO: 5500/4148

PEOPLE'S REPUBLIC OF CHINA

TELECOMMUNICATIONS SATELLITE SUCCESSFULLY POSITIONED IN ORBIT

HK210203 Beijing ZHONGGUO XINWEN SHE in Chinese 0959 GMT 20 Feb 86

[Text] Beijing, 20 Feb (ZHONGGUO XINWEN SHE)--Today, at 1700, the telecommunications and broadcasting satellite launched by China at its Xichang Satellite Launching Center in Sichuan on 1 February, was placed accurately in its permanent orbit above the equator at longitude 103 degrees east.

It has been reported from the Weinan Control Center that the instruments and equipment aboard the satellite are working normally, that it has begun beam- ing telecommunications, broadcasting and television signals, and that it will soon be put into actual use.

This is the second synchronous telecommunications satellite to be launched by China with a "Long March 3" three-stage rocket, over the past 2 years. The satellite launched on 8 April, 1984, was placed in its permanent orbit above the equator at longitude 125 degrees east. This satellite is now re- laying telecommunications, broadcasting, and television signals. It is said that the rockets used liquid hydrogen and liquid oxygen as propellant, on both occasions.

Today, the CPC Central Committee, the State Council, and the Central Military Commission sent a congratulatory telegram saying that the successful position- ing of the second telecommunications satellite, indicates that China has thoroughly mastered the technology required for the production, launching, and tracking of carrier rockets; that China's satellite communications has moved from the experimental into the application stage; and that there has been new progress in aerospace technology and electronics.

/6662

CSO: 5500/4148

PEOPLE'S REPUBLIC OF CHINA

CHINA'S SATELLITE TRACKING, CONTROL IMPROVED

OW071126 Beijing XINHUA in English 0745 GMT 7 Mar 86

[Text] Beijing, 7 Mar (XINHUA)--The positioning maintenance precision of China's second telecommunications and broadcasting satellite is six times that of the first, satellite expert Xia Mingzhi said here Thursday.

"This marks fresh progress in tracking and control of the earth-synchronous satellite," said Xia, who is in charge of launching.

The second satellite was launched 1 February and placed in its permanent orbit above the earth's equator February 20. The first was launched 8 April, 1984.

Xia said that Chinese scientists had also improved considerably their ability to track and control the second satellite's orbit, altitude and rotating speed.

Moreover, the second satellite's drift angle is much smaller than the first, he pointed out.

This means that reliability and automation of the new satellite's tracking and control system are performing better.

Via the new satellite, all parts of the country can receive the China central television station programs with a six-meter antenna, compared with a 12-meter one that was necessary to receive programs via the first.

Since 1970, Chinese scientists have completed tracking and control of 18 satellites.

/6662

CSO: 5500/4147



PEOPLE'S REPUBLIC OF CHINA

FUJIAN BUILDS TWO MAJOR TELECOMMUNICATIONS CIRCUITS

HK110843 Beijing ZHONGGUO XINWEN SHE in Chinese 0917 GMT 7 Mar 86

[Text] Beijing, 7 Mar (ZHONGGUO XINWEN SHE)--According to a JINGJI CANKAO report, the Post and Telecommunications Administrative Bureau in Fujian Province has begun building two major telecommunication circuits in the province one with transmission through electric and optical-fiber cables and the other through digital microwaves. When the two major telecommunications circuits are completed, 70 percent of the province's long-distance calls will be automatic or semiautomatic and a number of cities will be able to use automatic dialing to make international calls.

The two major telecommunications circuits are key projects for the Fujian Provincial Telecommunications Department in the Seventh 5-Year Plan. They include replacing the open-air telephone lines from Yingtian to Xiamen with an optical-fiber cable which, together with the completed electric cable between Fuzhou and Xiamen, will form a large circuit; transforming the former analogue microwave trunk line between Fuzhou, Xiamen, and Zhangzhou into a digital microwave trunk line which, together with the digital microwave trunk line to be built between Nanping and Jianping, will form a digital microwave circuit.

The project to transform the trunk line between Fuzhou, Xiamen, and Zhangzhou into a digital microwave trunk line is now under way and the Sanmin, Yong'an, and Zhangping stations along the Nanping-Zhangping microwave trunk line are under construction.

/6662

CSO: 5500/4148

PEOPLE'S REPUBLIC OF CHINA

XIZANG'S FIRST STAGE OF LHASA SATELLITE GROUND STATION COMPLETED

HK120701 Lhasa Xizang Regional Service in Mandarin 1130 GMT 7 Mar 86

[Text] The first stage of the national communications satellite ground station project in Lhasa has been completed. On 5 March, the satellite ground station started fully automatic and semi-automatic telephone services to Beijing.

Lhasa is now included in China's national satellite communications network. Now, people can call their Beijing counterparts via telephone by telling the telephone service counter in Lhasa City Telecommunication Bureau, the telephone number of their Beijing counterparts. Then, they can talk with their counterparts within a short time.

The satellite ground station in Lhasa is one of the three stations in the region assigned by the CPC Central Committee and the State Council. Since its beginning, the project has attracted the close attention of the CPC Central Committee and the State Council. The leadership of the Ministry of Posts and Telecommunications called the region several times and asked about the progress of the project. In addition, they supported the project in terms of manpower, material and financial resources, as well as technological force. Therefore, the progress of the project was guaranteed.

The leadership of the Regional CPC Committee and People's Government also attached great importance to the project. The construction team of No 2 Xian Engineering Company of the No 1 Research Institute under the Ministry of Posts and Telecommunications put stress on the quality of the project and made contributions for putting the station into operation at an earlier time.

Following its completion, the satellite ground station will play an important role in promoting the region's economic development, exchange of information and social development. With the approval of the Ministry of Posts and Telecommunications, the region has been included in the network of international communications satellites.

/6662  
CSO: 5500/4148

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

SHANXI BROADCASTING, TELEVISION FORUM--On the evenings of 4 and 5 March, the provincial broadcasting and television department invited the responsible comrades of all prefectures and cities attending the provincial conference on economic and planning work and leaders of the provincial economic committee and of the planning committee to a forum. They expressed their views on how to arouse the enthusiasm of all quarters and on how to develop our province's broadcasting and television cause. The comrades of all prefectures and cities declared: We must work hard to do our local broadcasting and television work well and expand the areas of coverage so that all townships and villages, particularly the masses in the poor counties and villages, can listen to broadcasts and watch television programs. (Jing Chengxu), chairman of the provincial economic committee; and (Wu Hunzhou), chairman of the planning committee, demanded: All places must make serious arrangements and work out plans for vigorously supporting the development of the broadcasting and television cause. We must give full play to the role of broadcasting and television--the most powerful modern means of propaganda--in the course of building the two civilizations. [Text] [Taiyuan Shanxi Provincial Service in Mandarin 2300 GMT 5 Mar 86 HK] /6662

PROVINCES PROGRAMS VIA SATELLITE--The communications and broadcasting satellite for practical use which China launched on 1 February was accurately placed in its permanent orbit above the equator at 103 degrees east longitude at 1730 today. The CPC Central Committee, the State Council, and the Central Military Commission sent a greeting message to all comrades who had taken part in research and construction, launching, tracking and control, application, and safety work, congratulating them on the success in permanently positioning the communications satellite. Meanwhile, the Ministry of Radio, Cinema, and Television also sent a message congratulating those concerned on the success in placing the communications satellite in permanent orbit. A station reporter learned from the Beijing satellite ground receiving station that this evening satellite ground receiving stations in Hebei, Shanxi, Shaanxi, Jiangsu, Shanghai, Hunan, Sichuan, Guizhou, Yunnan, Gansu, Xizang, and part of Xinjiang began receiving the national hookup news program of the Central Television Station and the national hookup program of this station transmitted through this communications and broadcasting satellite. [Excerpts] [Beijing Domestic Service in Mandarin 1200 GMT 20 Feb 86 OW] /6662

HEBEI RADIO-TELEVISION EXPANSION--By the end of 1985, Hebei Province had built an additional 24 radio stations, 6 times the total number of stations built in the past 34 years. To date the province has 1 provincial radio station, 3 prefectural radio stations, 6 city radio stations, and 18 county radio stations, and about 51 percent of the population can receive provincial radio programs. To date Hebei Province has 1 provincial television station, 1 prefectural television station, 2 city television stations, and 4 country television stations. Together with the newly established television relay stations, the province' television coverage has reached 76 percent. [Summary] [Shijiazhuang HEBEI RIBAO in Chinese 9 Feb 86 p 1 SK] /6662

HARBIN, EDMONTON TELECOMMUNICATIONS PACT--Harbin, 6 Dec (XINHUA)--The newly established sister cities of Harbin and Edmonton have signed a telecommunications equipment agreement, local city officials said today. The agreement, between the Harbin Municipal Telecommunications Bureau and a telephone company based in Edmonton, Canada, was the first item of cooperation for the two cities, which became sister cities yesterday. Under the agreement, the Canadian telephone company will sell Harbin 17 switchboards with 2,004 lines at preferential prices. The company will also provide advanced technology and training telecommunications personnel for Harbin. [Text] [Beijing XINHUA in English 1459 GMT 6 Dec 86 OW] /6662

URUMQI SATELLITE GROUND STATION--Urumqi, 25 Jan (XINHUA)--A satellite ground station has been built and connected to the international network here in the capital of the Xinjiang Uygur Autonomous Region, according to the XINJIANG DAILY. The International Telecommunications Satellite Organization (Intelsat) announced earlier this month that the Urumqi satellite ground station was up to the world standard and could be connected to the network, the paper said. The ground station will start telephone and TV services to other ground stations in the country's major cities. The paper said this would help improve the northwest region's telecommunications links with other parts of the country. China plans to build a total of 20 such ground stations. The central government will rent a transmitter satellite from Intelsat as a temporary measure to expand China's TV broadcasting range before its own communications satellite system becomes operational. [Text] [Beijing XINHUA in English 1629 GMT 25 Jan 86 OW] /6662

SHANGHAI INTERNATIONAL PHONE INCREASE--Shanghai, 27 Feb (XINHUA)--Shanghai will increase its international telephone lines from 400 to 1,000 by 1990, an official of the city posts and telecommunications department said here today. Shanghai is China's leading industrial center and one of the country's 14 coastal cities encouraging foreign trade and advanced technology. The city plans to increase its urban telephone capacity from 270,000 lines to 600,000 over the next five years. Long-distance telephone lines are expected to increase seven-fold to 7,000 of which 80 percent will have direct dialing. To accomplish these goals, Shanghai will import program-controlled exchanges and optical fiber technology to transform the present microwave telephone system, the official said. [Text] [Beijing XINHUA in English 0743 GMT 27 Feb 86 OW] /6662

BEIJING-XIZANG SATELLITE TELEPHONE--Lhasa, 11 Mar (XINHUA)--People in Beijing can dial direct to Lhasa, capital of the Tibet Autonomous Region, via satellite. "The use of satellite communication since last week has shortened the time for putting through telephone calls between the two cities," said Du Baoliang, deputy director of the regional posts and telecommunications administration, today. "It takes only one minute for people in Lhasa to talk with people in Beijing through the semi-automatic telephone service, and the sound is clear," he said. A similar telephone service will be opened soon between Lhasa and Shanghai, Wuhan, capital of Hubei Province, and Chengdu, capital of Sichuan Province, according to the deputy director. The Lhasa satellite ground station is one of five such stations planned by the Chinese Government and built by the Ministry of Posts and Telecommunications. [Text] [Beijing XINHUA in English 1527 GMT 11 Mar 86 OW] /6662

CSO: 5500/4147

ARGENTINA

BRIEFS

TELECOMMUNICATIONS COOPERATION AGREEMENT--Buenos Aires, 6 Mar (TELAM)--Argentine Telecommunications Secretary Roberto Zubieta and French Telecommunications Minister Louis Mexandeau today signed a scientific and technical mail and telecommunications cooperation agreement. Through this agreement Argentine professionals and experts will be trained and given experience on the modernization of services which will benefit the Argentine National Telecommunications Enterprise [ENTEL] and the National Enterprise for Mail and Telegraph [ENCOTEL]. The agreement will also establish contacts to ensure the transfer of technology and a genuine strong investment to increase the already established industrial capacity of Argentina in the communications field, with a consequent increase in jobs. The subjects included in the scientific and technical cooperation agreement are the following: a switching and data transmission system, integrated network with its supports, transmission systems including satellite communication and a rural telephone system. The agreement also contemplates the installation of a microelectronic and informatic research center, with overall tariff planning, the installation of a mobile radio telephone system, data transmission system, and a cable TV network. [Excerpts] [Buenos Aires TELAM in Spanish 1837 GMT 6 Mar 86 PY] /7358

CSO: 5500/2032

GRENADA

BRIEFS

FIRST TV TRANSMISSION--Grenadians have at last begun to see pictures on their television screens as Discovery Television carry out tests which began on Tuesday night and has continued each night since for a few hours. On the first night a recorded speech by Prime Minister Herbert Blaize was aired and, without any vocal announcements family entertainment films have been shown. It is believed that efforts are being made to make the arrangement permanent and that after a while programmes relayed from Trinidad and Tobago Television will be included in the evening's fare--but no one is willing to make an official statement on the subject, presumably until it is certain that the broadcast can indeed be permanent. Potential viewers have been asked to note that for the time being, only St George's can receive the station and set owners will need to turn their antennas towards the transmitter located on Fort Frederick at Richmond Hill. [Text] [St Georges THE GRENADIAN VOICE in English 15 Feb 86 p 16] /9317

CSO: 5540/052

11 April 1986

## GAMBIA

## AFRICA'S ONLY PRIVATE RADIO STATION CONTINUES OPERATIONS

Dakar AFRICA in French Nov 85 p 43

[Text] Such a pleasant trip. Comfortably settled in the "bus" making its way from Dakar to Banjul, crossing the Sine-Saloum which smelled of the freshness of a recent rain, I listened to the latest Anglo-Saxon and African hit singles coming from the car radio. It was judiciously preset at 329 meters on the medium-wave band, the frequency of the only private commercial radio station in all of Africa: Radio Syd. (Africa number one's case is different).

In 1959, aboard the ship "Cheeta" off the Scandinavian coast, a Swedish national named Britt Wadner made the first offshore broadcast, thereby circumventing the laws in effect at that time throughout Europe: the state monopoly of hertzian band communication. This was the birth of Radio Syd, but also the beginning of a long struggle for liberalization and independence that would lead to the emergence of thousands of local private radio stations in the industrialized countries. Twenty-five years after this premiere, the northern countries and their societies are at the apex of a communication explosion, but what is Africa's situation?

It is quite different. Rulers here have opted to use audiovisual means of communication as a political propaganda tool at the service of incumbent regimes, thus rejecting democracy of the airwaves.

Gambia, however, seemed to partially escape the general rule with the establishment of Radio Syd in Banjul in 1970. Tired of the glacial waters of the Northern Sea and captivated like thousands of her fellow countrymen by the mildness of the Gambian coast, Britt Wadner obtained authorization to establish a private, musical radio station from Dawda Jawara. May 7, 1970 marks the beginning of Radio Syd's irresistible rise on the Gambian, and soon the Senegalese, Malian, Guinean and Mauritanian airwaves. Wholly financed by advertising spots and calling itself an apolitical music station--an essential condition of its right to exist--Radio Syd is nevertheless a breath of freedom adding rhythm to the lives of hundreds of thousands of daily listeners.

Radio Syd's popularity is easily confirmed by the musical background that prevails in the labyrinth of Banjul's Albert Market or in a taxi.



With the aid of a powerful 2,500 watt transmitter and a high-performance generator, Radio Syd broadcasts 20 hours a day in 5 languages: English, French, Swedish, Wolof and Mandingo.

Radio Syd has no independent news program: it is Radio Gambia that is synchronized with the four daily newspapers and head of state's public statements. It is a full-time music station where live programs sponsored by cigarette and battery brands (Clarmont, Piccadilly King Size, Berec) which organize big prize radio games (automobiles, color TVs) alternate with recorded musical tapes. A want ad and communication service is also available to Ghanian listeners for the relatively moderate sum of 7.5 Dalasis (750 CFA Fr) for a message lasting a maximum of 1 minute.

From November to mid-April two daily programs of news and tourist information are offered to Scandinavian tourists in Swedish.

Constance Wadner Enhorning, daughter of Radio Syd's foundress, is currently director of the station. Overwhelmed by her radio station's large audience and by advertising financing, her medium range plan is to create a local, private television station operating on the same principle as Radio Syd. For the time being, however, the problem of a shortage of domestic electricity in Gambia and the excessive number of power cuts forestalls any initiatives in the area of private television. (National television will soon be established thanks to an 80,000 dollar loan from UNESCO, the Gambian minister of information, Landing Jallow Sonko, announced recently).

So let's wish good luck to Radio Syd which has just celebrated its 15th anniversary on the West African airwaves and which has, perhaps, inspired some vocations... When will we see a commercial radio station in French?

9825/12951

CSO: 5400/75

UGANDA

BRIEFS

JAPANESE AID FOR TV--The 13 vehicles purchased out of the Japanese grant and Uganda Government self finance amounting to \$3.1 million for the rehabilitation and expansion of Uganda TV have been formally handed over to the government in Kampala. Receiving the vehicles on behalf of the government, the permanent secretary, Mr Wilson Walyama, noted with appreciation that the Japanese side had performed their part of the contract on schedule and acknowledged that most of the equipment and items stipulated under the contract have been received. Mr Wanyama assured the Japanese side that everything possible will be done to ensure a smooth implementation of the project. He set June this year as the target date for the completion of the project and urged all ministry officials, government authorities and other organizations who are charged with various responsibilities in the implementation of the project to do their utmost best. [Excerpts] [Kampala Domestic Service in English 1400 GMT 7 Feb 86 EA] /6662

CSO: 5500/53

FEDERAL REPUBLIC OF GERMANY

NIXDORF'S PLANS FOR SUPPLYING ISDN EQUIPMENT

Duesseldorf VDI NACHRICHTEN in German 27 Dec 85 p 12

[Article by R. Schulze: "Newcomer Moves in--Transborder Standards Lacking in Digital Telecommunications"]

[Text] During the transition from analog to digital telecommunications technology the computer manufacturer Nixdorf entered the telecommunications business with telephone private branch exchange (PBX) installations. Nixdorf has for some time been able to supply ISDN PBX equipment for the digitization of exchange lines, i.e. the development of the narrow-band ISDN system of the Postal Service. But Nixdorf also is ready for the generation after the next one, the broad-band ISDN. But now it will be main exchange technology for the postal service.

The Nixdorf company is a newcomer in the telecommunications area, a newcomer who did not exist five years ago and who last fall was able to celebrate the sale of 1000 digital private branch exchanges.

Entry into the telecommunications business started in 1982 with the sale of telephone PBX equipment. That was the time when telecommunications changed from analog to digital technology.

Because entry into a new market at the time of technological change clearly appeared successful, the Paderborn computer manufacturer is trying it again, this time with entry into the public, postal service exchange technology.

"After all, today there is much talk about the integrated services digital network, referring to the narrow-band ISDN which is now being installed, but the next generation is already on the horizon, the broad-band ISDN, and we do expect a considerable share here. We believe that this is a good entry into the generation after the next, if we consider the narrow-band ISDN the next generation," states Dr. Horst Nasko happily, who is a member of the board at Nixdorf, responsible for telecommunications: "We find this to be the right path, to enter a new generation with new means."

In this generation after the next, we deal with the development of a glass fiber net, which is being installed by the German Federal Post Office next to the existing cables. This is called a broad-band overlay network.

"We have received an order to supply exchanges for the broad-band overlay network and have started operation of the first broad-band exchange in the network of the Federal Post Office in Dortmund a few weeks ago" comments Horst Nasko on progress.

Nasko reacts quite irritatedly to the question whether the digital private branch exchanges, which are available for early delivery by Nixdorf, comply with today's ISDN standard? The usually calm Austrian retorts: It is not Nixdorf who transmits with 80 kbits/s, but the competition.

ISDN does not only imply digitization of the telephone technology, but the availability of more communications power at the subscriber. With a genuine ISDN connection he has not only a voice channel available as in today's telephone, but two channels, and all this with only one line connection.

Both ISD channels can, compared to today's analog method, transport much more information per time unit, namely each channel can transport 64 kbits/s with an additional signalling channel of 16 kbits/s, which sees to it that the information goes where it is supposed to go. This provides the transmission speed of 144 kbits/s mentioned by Nasko. Exchanges which lack the second channel can obviously transmit only 88 kbits/s.

Availability of two channels permits the user, for example, to simultaneously hold a telephone conversation and also receive data from a computer on the same line.

Nasko comments further on the PBX systems offered by Nixdorf. "Our structure is absolutely ISDN-like. We transmit 144 kbits/s over the two wire line, which can be clearly shown. We have many customers in the market place which use this capability. I can name customers, where you can see that a personal Macintosh computer from Apple, and an IBM PC, and a Siemens PC are connected to the telephone, and that data can be transmitted while telephoning."

And as if further proof were required, Nasko cites the Bundespost exhibit during the Systems Fair in Munich in november, where the Nixdorf telephone and attached personal computer were the only ones demonstrating a transmission speed of 144 kbits/s.

But the world of the narrow-band ISDN is not as standardized as it may seem. There are interfaces, which, according to Nasko will probably never become standardized. In the end it is a matter of the manufacturer how he connects his specific terminal equipment with his private branch exchange: We, however, are working in the Central Association of the Electrical Industry to develop a generally valid interface for our members firms, or say for Germany, which is similar to our present interface, and which will then, if the standard is followed, permit connection of terminals of all manufacturers to exchanges of all manufactures.

The Federal Post Office will demonstrate its first ISDN connections in 1988, pilot projects are operating in Mannheim and Stuttgart. But here too not all standards which were established by the Post Office for the pilot projects are internationally recognized. Not even in Europe can the postal people agree on something.

The Austrian Nasko, who as member of the board of the Paderborn manufacturer resides in Munich, is careful not to criticize people who might be tomorrow's customers: "In Brussels we are participating to have an effect especially on the standards organizations. One problem is that many of these things are being delayed because the standards have not yet been approved. The EG commission is very active in this respect. Not that it wants to develop its own, or new standards, but it wants to see to it that the existing standards organizations accelerate their work."

While standards in the computer field can always be established through the market domination of a manufacturer, suppliers of telecommunications equipment have always waited for the standards of the responsible postal authorities.

Despite liberalization and standards, whoever wants to sell something to a postal administration or wants to connect to one of their cables must satisfy country-specific regulations. Many computer manufacturers learned this the hard way.

"If you are active in foreign countries in the field of telecommunications considerable development is required to be able to adapt. Each country has different interface conditions, signaling methods, standards and regulations," reminisces Heinz Nasko on what had to be done to adapt his equipment to nine foreign countries. "Sooner or later we also will be active in the United States, but there the effort to adapt is especially great, and that is the reason that we have not worked very hard in the USA."

In this connection the member of the board cites the Minister of Post and Telecommunications Christian Schwarz-Schilling, who has shown that American companies have supplied, and still supply much more telecommunications equipment to the Federal Republic of Germany, and not only through their German subsidiaries, than German companies supply to the USA. German equipment can be found in the US only in very small numbers. Nasko: "that is damned little."

Licensing requirements in the USA are, notwithstanding formalities, not any simpler in the technical area than here, says the Nixdorf board member, who thus in no way shares the opinions of the defenders of the alleged liberal American market. As an example, the documentation to demonstrate to a licensing authority that equipment meets required specifications is much more comprehensive than here. It far exceeds what is required in Germany.

While the computer segment of Nixdorf shows lively cooperative activity as, for instance, with the Pyramid company in the US, and as a result CAD (computer aided design) activities enrich the product offerings, the telecommunications segment of the company will be busy even without the US market.

Heinz Nasko prognosticates: "We expect a greater market penetration next year, and a further expansion of the market share for all of our products."

In the telecommunications area the following products are offered:

- Private branch exchanges
- Exchanges for the Postal Service
- Wide-band inhouse networks, say for companies which want to transmit data rapidly, as between CAD stations and
- Telecommunications terminals.

"We will also invest strongly in terminals, in multifunctional terminals, which will be adapted step-by-step to the ISDN world. Everyone who wants to use new services requires a new terminal" comments Nasko on this future market. The terminal market in the Federal Republic will surely be liberalized. The offerings of terminals which at the user end will be connected to an ISDN line will also increase.

An EG market study shows very clearly that in Europe the share of public, postal exchanges in the telecommunications market is on the decrease, while the share of private investment in this market remains stable. The share of sales of exchange installations are decreasing in the long term, while terminals show large shares of increase.

"We are developing terminals, which find use both in communications services in general, but also in data processing systems, replies Horst Nasko to the questions why the telecommunications field does not show such growth rates as the computer field: "these terminals can be considered either telecommunications or data processing. But terminals will certainly show growth rates with two digit percentage figures."

7994

CSO: 5500/2620

FEDERAL REPUBLIC OF GERMANY

DBP ISDN PILOT PROJECTS IN 1986/87 IN STUTTGART, MANNHEIM

Duesseldorf VDI NACHRICHTEN in German 10 Jan 86 p 2

[Article by R. Schulze: "Several Communications Media at the Work Place, Schwarz-Schilling Sees German Federal Post Office in Leading Position"]

[Text] In contrast to other countries there will be no local limited introduction of digital telecommunications technology but instead the integrated services digital network (ISDN) will be installed area-wide after completion of the pilot projects in Stuttgart and Mannheim. This was emphasized by the Minister for Post and Telecommunications, Christian Schwarz Schilling at the occasion of announcement of a medium-term development program for communications systems.

Digitization of the telecommunications network and the resulting more rapid transmission of communications can be followed most simply by the postal patron by watching the telephone system. Introduction of the Integrated Services Digital Network permits, for example, the owner of an ISDN connection to simultaneously make a telephone call and transmit data and he also can call up different telecommunications services. New forms of communication are offered as for instance between electronic typewriters and remote copiers, (teletex and telefax), calls to different data services, and video screen text.

The German Federal Post Office will in 1986/87 make a test bed available with two pilot projects in Stuttgart and Mannheim to all terminal manufacturers for their development. Based on this, introduction of ISDN control is planned for 1988, with a transmission speed of 64 kbits/s, explained Minister Christian Schwarz-Schilling in explaining at year's end the development strategy, which is described in detail in a brochure. It is entitled Medium Term Program for Development of Technical Communications Systems, will be the basis for a postal symposium on 17 January in Bonn, and is available from the press section of the Federal Ministry for Post and Telecommunications.

As Schwarz-Schilling explained in the discussion with the VDI-Nachrichten, the potential for ISDN connections is initially based on two to three million business related main connections, to which are connected over 11 million subscribers via substations: the private branch exchanges quadruple connection possibilities for ISDN terminals. Until 1990, according to the minister, there could be one million connections to the private branch exchanges.

Based on the already available rate structure, an ISDN main connection will cost DM 54 per month base charge plus a surcharge of DM 10 if the connection

is used for more than voice only. ISDN offers, in addition to voice, also data transmission with two simultaneous available channels of 64 kbit/s each. Since this additional use justifies an ISDN connections, an additional DM 64 have to be paid to the Post Office for the main connection.

The minister emphasized that the German Federal Post Office provides not only planning integrity through the fee structure, but that it has achieved a leading position internationally through efficient digitization of the telecommunications networks culminating in the ISDN operation. Since the ISDN is built on the present copper line net, which has been constructed very carefully, conditions in the Federal Republic are very favorable.

Special value is placed by the DBP on uniform expansion of the ISDN without placing some areas at a disadvantage. In other countries service has been limited to certain metropolitan regions. Also the date of service introduction puts the Federal Republic in a top position.

Digitization of transmission technology started in the Federal Republic already in 1982. The 6200 local exchanges will by the year 2020 be completely converted to the new technology, while the 500 long distance exchanges will be converted by the turn of the century. Digitization of the local lines will cost DM 6 to 8 Billion.

7994

CSO: 5500/2620



FEDERAL REPUBLIC OF GERMANY

BRIEFS

FRG CABLE NETWORK PLANS--By 1987/8, the German Federal Post Office must have about 4.4 million TV households connected to the cable network. On this depend not only the economic feasibility of this broad band distribution network, but also the existence of private television program producers. This is the conclusion reached by Prof. Dr. E. Witte, president of a Munich association of experts, called Munich circle, in a recently published study. Only this number of subscribers would create the minimum requirement for securing the economical operation of private television stations. Experts disagree whether the Federal Post Office can meet this goal. First, such a cable connection requires additional charges, and secondly, it is not yet available everywhere. At present, only 1.6 million households subscribe to the TV network. According to figures of the German Federal Post Office, the number of subscribers will reach 2.5 million in 1986. In order to reach additional subscribers as fast as possible, DM 1 million to 1.5 million are invested annually in this area. Extension of the network is made on a priority basis primarily in densely settled areas. The charge structure for TV cable connections, introduced in the fall, will remain unchanged until early 1986 in order to encourage hesitant customers to subscribe.

[Text] [Duesseldorf VDI Nachrichten in German 27 Dec 85 p 1] 7994

CSO: 5500/2620

FRANCE

#### FRANCOPHONE SUMMIT DECISIONS ON TELECOMMUNICATIONS DETAILED

AB271648 Paris Diplomatic Information Service in English 1448 GMT 27 Feb 86

["Conference of Heads of State and of Government of the French-Speaking Countries (17-19 February 1986). Decisions."]

[Excerpt] International Francophone Television Pictures Agency

1. In every country in the world television news is largely dependent on the international circulation of pictures with commentaries: (98 percent) of this material is currently supplied by English-language agencies.

2. On France's initiative, the conference decided to found an Agence Internationale Francophone d'Images Televisees (AITV) to provide within the three years a worldwide twenty-minute daily news service adapted to the major regions of the world. It will supply pictures from all Francophone countries of both North and South.

3. The technical base will be provided by the French public-service RFO (Societe Nationale de Radio-Television Francaise d'Outre-Mer) which has already begun to operate such a service.

4. AITV will cost 16 million French francs per year for three years. France will contribute Fr 5 million in the first year.

#### TV 5

1. TV 5 is a Francophone programme for the European cable networks, supplied jointly by the French, Belgian, French-speaking Swiss, and, since this year, Canadian and Quebecer-Canadian public-service television organizations. But TV 5's total programme transmission time and catchment area are still insufficient.

2. The conference adopted the principle of extending its catchment area to North America and other geographical areas. To this end, consultations between the relevant ministers will be held in the near future.

The conference also adopted the principle of opening up the service to the southern Francophone partners' programmes. The countries concerned might form a consortium for the purpose.

3. With a view to doubling programme transmission on TV 5 and widening its catchment area, France is prepared to increase her contribution to Fr 29 million.

#### Satellites and Francophonie

1. The conference expressed a wish to use satellites to increase broadcasting of Francophone programmes in the world.

2. France--currently carrying out her TDF 1 [Television de France] direct television satellite launch programme--offered to open one of the satellite's four channels to Francophone programmes. This will be done within the cultural and European channel, a subsidiary of the public service, which has just been created and should begin transmission via the satellite at the beginning of 1987.

#### Consulting Data Banks on an International Scale Using Videotex Systems

1. The most modern aspects of communication, and in particular the consulting of computerized data banks, must be developed in the Francophone area.

2. There is a simple, low-cost system of consulting, using the telephone and a display terminal--Videotex. In France, two thousand data banks are currently accessible to private individuals and firms through the telephone network and the system is meeting with considerable success since one-and-a-half million minitel terminals are now in service.

3. Extension of the service to the Francophone world would be desirable. Action can be taken in two specific directions to reduce the cost of the user:

a. International transmission, the rental of a telephone circuit for each call is very expensive. Setting up packet switching systems at both ends and at the interconnections would cut the time on the international telephone line itself and therefore the cost of the call. So far packet switching systems have been set up in the Ivory Coast, Gabon, Cameroon, Canada, Belgium, Switzerland, Luxembourg, and France. They are planned in Tunisia and Senegal. With this system transmission costs can be cut to half or even less than a quarter of those using conventional telephone circuits. For example, calls between Gabon and Europe would cost Fr 4 a minute compared with Fr 22 a minute with the conventional system.

b. Payment for using the data bank itself. Under what in France is known as the kiosk charging system--by analogy with a newspaper kiosk--the user no longer has to have a contract with the data bank. The telephone network invoices the caller directly and automatically (using a meter) and then passes on a proportion of the payment to the data bank. The latter sees a huge increase in customers because the system is so simple and can then reduce its charges considerably, as has happened in France. So France proposed and the conference agreed to set up a working group on that matter, to deal with both the technical and economic aspects. It will meet during 1986.

## Data Banks and Videodiscs

1. Totally new prospects for education are now offered by the new data processing technologies which combine:

--Processing and microcomputing capacity;

--Optical storage of both text and pictures;

--Use of quasinatural documentary languages for exploring the content of scientific and technical data banks.

Pictures are playing an increasing role in medicine, particularly for student and practitioner training. The end-product of the project adopted by the conference is therefore a new training tool for students and practitioners calling on a new technology for storing and disseminating data--the videodisc.

2. Today 50,000 video pictures can be stored on a 30cm diameter disc and any picture or sequence can be projected on an ordinary television screen, using a microcomputer and interrogation software combining natural language and the language of the medical specialization.

3. The conference asked for a working group to study the use of videodiscs in medical training in Francophone countries, on the basis of experimental schemes already underway, particularly in France (La Salpetriere Hospital).

France, which is going to install videodiscs in several French medical faculties, proposed to contribute around Fr 3 million to extend the trials to medical faculties in other Francophone countries. That would enable 10 centers or faculties to be equipped and supplied with documents on videodisc and users trained.

/9365

CSO: 5500/2631

FRANCE

#### NEW ORGANIZATIONS PROPOSED IN DECREE ON PTT REFORM

Paris ZERO UN INFORMATIQUE in French 13 Jan 86 p 9

[Article by ES; first paragraph is ZERO UN INFORMATIQUE introduction]

[Text] The Ministry of PTT is going to reorganize. The reform plan introduced by Louis Mexandeau is intended as a response to the deregulation phenomenon.

The organization of the PTT Central Administration is based on legislation dating back to 1971. In 15 years, however, quite a number of advances have wrought deep changes in the world of communications: The advent and rapid diffusion of new techniques, the overlapping of sectors of activity theretofore isolated from each other, the increased role of telecommunications in the electronics field and in new sectors such as space, and finally, and perhaps above all, the turbulences buffeting the international environment as a result of the deregulation phenomenon. All these factors, but also a need to maximize the effectiveness of general directorates, call for a structural reform.

#### Ensuring Continuity of Public Service

"The PTT must be able to meet the competition from multinational groups which is about to make its advent if it has not already done so," explains the minister of PTT in the magazine MESSAGES DES PTT. The problem is how to create a true "PTT enterprise."

Privatization is automatically ruled out, since it would be tantamount to putting to an issue again a tradition of the public service and would weaken the PTT enterprise vis-a-vis its international competitors. The transformation of the PTT into public utility entities or state-owned companies is also excluded, since this would amount to breaking up the unity of the PTT and changing the legislation, without guaranteeing any improvement in the operation of the industries.

The approach that has actually been decided on, and which is felt to be an offensive French response to the problem of deregulation, limits itself

to clarifying roles and assigning responsibilities to those concerned, within the current legislation governing the PTT. Thus, the proposed reform, as submitted during a recent meeting of the Higher Council of the PTT and approved 19 December last--by a vote of 24 to 6--by the Joint Technical Committee, rests essentially on two points:

--Creation of a general delegation for strategy (as we reported in 01 HEBDO No. 884), whose mission will be to determine the principal long-term policy guidelines for the Post and Telecommunications branches of the PTT, which will be binding on the Ministry; exercise the regulatory authority; and evaluate the advances in the electronics sector and exercise oversight of that sector;

--Bringing of the DIPAS [Directorate of Personnel and Social Matters], on the one hand, and the BC [Directorate of the Budget and Accounting], on the other, under one overall, "horizontally" configured, Delegation of Common Affairs. This new body will be charged specifically with laying down the general regulations governing personnel administration and management, and budgetary and accounting regulations, and with responsibility for ensuring their application.

At the same time, the management responsibilities of the PTT's two branches--Posts and Telecommunications--will be increased, with their general directorates required to operate as responsible and accountable entities while adhering to the principle of unity of the PTT. Convinced that it is entirely possible to combine public service with efficiency and profitability, Louis Mexandeau adds: "By modernizing the networks, offering new services, improving the quality and reliability of service, and having a clear and competitive tariffs and rates policy, the Ministry of PTT will respond validly to the competition and implement an offensive strategy in relation to the public service."

9238

CSO: 5500/2615

11 April 1986

## FRANCE

## BRIEFS

SEP-MATRA JOINT VENTURE--Paris--On 14 January, in Paris, the SEP [European Propulsion Company] and Matra announced their participation in a joint venture, the "Image International" group, in the civil and military observation satellite image processing market. This GIE [economic interest group], baptized "G21," will enable the two companies to "coordinate their efforts in France and abroad, and share the responsibilities and tasks involved in the execution of the contracts obtained," said an SEP spokesman. The two companies also plan to organize R & D programs on new systems and products in this domain. [Text] [Paris AFP SCIENCES in French 16 Jan 86 p 21] 9238

CGCT ACTIVITY TO MATRA--Paris--The nationalized group CGCT [General Telephone Construction Company, formerly ITT France] has signed an industrial, commercial and financial agreement ceding its private telephony activities to Matra, it was learned from the two companies in Paris on 15 January. This link-up plan, which was the subject of a CGCT central works committee proceeding, calls for the creation of a subsidiary for telephone instruments, business telephony and radiotelephony activities, and telematics terminals. Its disclosure marks the first step of a "sale by compartments" of the CGCT, with a view to the eventual signing of an agreement that is still pending between the CGE [General Electric Company] and AT&T in the domain of public telephony, according to informed sources. The American giant would thus gain the 16-percent share of the French telephony market presently held by CGCT, which would then become AT&T's subcontractor. [Text] [Paris AFP SCIENCES in French 16 Jan 86 p 26] 9238

FIRST PRIVATE COMMERCIAL TV NETWORK--Paris, Feb 21 (AFP)--France's first private commercial television network "Channel-5" began broadcasting last night with a potential 18 million viewers in 14 cities, breaking the 30-year monopoly of the three state-run stations. The "5" broadcast a four-hour gala opening programme from Milan, headquarters of Italian "TV spaghetti king" Silvio Berlusconi who runs the network with France's Jerome Seydoux. For the first time in France, advertisements interrupted the entertainment for 120 seconds each 10 minutes. Until now, such spots were allowed here only before and after each programme. Mr Berlusconi has announced that advertising revenue for March totals 150 million francs (about 20 million dollars). The decision to permit a private network was taken, surprisingly for many, by a Socialist government which has always maintained that the radio and television media should be used largely for educational and cultural purposes. But critics of the Berlusconi fun-mill claim that he will lower general standards. There has also been political attacks on President Francois Mitterrand for allowing "5" to open only a few weeks before the March 16 parliamentary elections, turning voters' attentions from more serious matters with game shows and leggy dancers. [Excerpts] [Paris AFP in English 1325 GMT 21 Feb 86] /9365

CSO: 5500/2631



ITALY

TELETTRA EXPANDS TO U.S.

Rome LA REPUBBLICA in Italian 11 Jan 86 p 33

[Text] Telettra (the telecommunication company controlled by FIAT) arrives in the United States in partnership with GTE, another Italian company, although its capital is controlled by the American multinational company of the same name. The aim is to take away some of the market controlled by giants like ATT, Northern Telecom, Rockwell, and the Japanese NEC.

To achieve this goal the two Italian companies have formed a company called "G and T" whose task is to market a particularly sophisticated high performance radio relay. According to plans, by 1990 the new company should control 12 percent of this specific market. The current value of this share of the market is around 60 billion lire.

The initiative was explained yesterday by Raffaele Palieri, the managing director of Telettra, and by his colleague from GTE Communications, Sergio Treves. Together, the two companies control 30 percent of the European market for high capacity digital radio relays, the value of which in 1985 was equal to 420 billion lire. Now with "G and T" they hope to also make a breakthrough in the US. One should point out that the users' standards are different on the opposite sides of the Atlantic and therefore new lines of production will have to be activated. Presently, only the Japanese from NEC sell their radio relays both in Europe and in the US.

While answering a few questions, the managing director of Telettra explained that the new accord does not exclude Italtel, the company of the STET group with whom Telettra is preparing to sign an accord. To this end, he explained that a mixed group FIAT-STET, soon to begin its work, has been tasked to study the synergies between the two companies and the eventual merging of some of their activities.

Regarding the 85 balance-sheet, Palieri announced that the gross receipts amounted to 485 billion lire (+18 percent) and those from foreign enterprises 250 billion lire.

On its part, GTE registered a sales volume of 500 billion lire with an increase of 20 percent. Profits will be higher than last year, although the executives didn't give any figures.

ITALY

STET, MONTEDISON FORM TELEVAS TO EXPAND SERVICES

Milan COME - COMUNICAZIONE MONTEDISON in Italian Nov 85 pp 6-7

[Text] The field of teleprocessing, so strongly influenced by technological innovations, does not guarantee survival and growth to those that are merely able to present products or furnish increasingly sophisticated and competitive services.

This assumption is behind the decision which compelled Montedison and STET to form a new company to provide, design, and market value added teleprocessing services.

The company, presented last November 20 at a press conference in Milan, is TELEVAS, headed by Simone Fubini; 51 percent of its stocks are held by SEAT (of the STET group) and 49 percent by Me.T.Z. enterprise (of the Montedison group). TELEVAS has an initial capital of 2 billions which could be augmented within a short time. Regarding its company and personnel structure, the company will rely on a central nucleus of approximately 35 highly skilled professionals to be hired directly from the market. Around this central nucleus will gradually converge the planning and management personnel necessary to satisfy outside orders and distribution activities connected with the services to be provided. TELEVAS could reach a level of a hundred employees within 3 years, while after 2 years in the market its gross sales should be about 15 billions.

What is the objective of this company borne out of two giants from the public and private sectors? The specific objective of TELEVAS is to conceive, realize, manage, and market telecommunication network services through which some messages are stored or processed in such a way as to add a commercial value as these are transferred from the sender to the receiver.

These services, in operational usage, are in fact defined as value added services and also include processing connected with data collection and transmission efforts over large areas. In particular, the company will operate in Italy and outside in value added services geared to specific classes of merchandise, that is, to defined segments of the market where it applies.

The first applications of TELEVAS will concern the retail sales segment of the Montedison group (STANDA and Euromercato). Thus large scale and significant

experience can be accrued and subsequently used in the open market, after an initial period of supervised development.

The engineering and software capabilities present in the two group of companies will allow TELEVAS to be independent from software companies; these will be selected on the basis of their responses to the requirements of the service.

Since we are dealing with essentially application services, public communication networks will be used for information transmission (thus the presence of STET through SEAT); an important role will be played in this respect by the telephone concessionaries.

In its first phase of operations, lasting a couple of years, TELEVAS can be considered a "test ground for applications" to verify the real applications of value added services during transmission (electronic bill-paying, management of chain stores, logistics, etc...). After this phase, which will permit an economically balanced start, the unprotected market will be faced with a fee structure which will consider both the cost of data transmission (fixed by the public networks managed by SIP) and the effective added on value offered and evaluated on a commercial basis.

Montedison and STET decision to come out with this type of service is not fortuitous.

For the financial arm of IRI in the sector of telecommunications, this enterprise means carrying out a technical and commercial supervisory role over the positive synergies presented by value added services and the ITAPAC public data transmission network. Besides, STET has intentions to also offer this type of service on the free market, entrusting to SEAT the execution of the first endeavor since SEAT has already begun operations in the field with the recent introduction of the "electronic yellow pages", the first sizeable value added service.

For the Montedison group the decision to operate through the Me.T.A. company appears as an obvious choice.

It is, in fact, in this environment that opportunities of synergies and integration of services arise, and this is the primary objective of the Montedison subholding company for advanced services, strong in the specific know-how acquired through Datamont's management of one of the major private telecommunications networks in Italy. The reasons compelling Me.T.A. enterprise to enter this sector have been amply illustrated by the vice-president and managing director of the company, Giuseppe Garofano.

He pointed out that teleprocessing, computer processing, and telecommunications, in addition to being services in their own right, constitute a fundamental infrastructure for the development of other sectors of the service company. Consequently, for Me.T.A. enterprise, an integrated service company, the participation to TELEVAS represents an operational choice of strategic character.

Garofano also stressed that the characteristics of the two partners are guarantee for a rapid success in its activities, starting with the retail distribution sector.

In fact, the market which can be acquired by TELEVAS appears rather solid.

Limiting the analysis to the distribution sector, and excluding direct involvement with the end-product clients and considering only the operational users, the potential customers could be 800,000 small independent businesses, including wholesale and retail food and non-food dealers; about 7,000 chain stores (supermarkets, discount stores, cash and carry, etc...); and about 20,000 companies which manufacture goods to be marketed. Finally, in case of a controlled promulgation of services, even if limited to the distribution sector, it does not seem unrealistic to forecast a market in which TELEVAS will be able to achieve leadership position.

#### Fact Sheet for TELEVAS

The company objective includes all activities connected with the design, implementation, management, and marketing of services using telecommunication networks, through which some messages are processed in a way such that a commercial value is added as these are transmitted from the sender to the receiver.

Main office: Via Cernaia, 2 - 20121 Milan

Capital: 2 billions

Shareholders: SEAT 51 percent; Me.T.A. Enterprise 49 percent;

Board of Directors:

President: Engineer Simone Fubini

Members of the board: Dr. Paolo Bassi; Dr. Matilde Bernabei; Dr. Paolo Bronzoni; Engineer Giuseppe Garofano; Engineer Alfonso Graziani; Engineer Giorgio Marelli; Dr. Francesco Silvani; Accountant Mario Tesio.

General Manager: Dr. Achille De Tommaso

13120/12790

CSO: 5500/2594

ITALY

## SIP ADOPTS PACKET NETWORK

Rome L'UNITA in Italian 8 Feb 86 p 15

Let's consider characters and numbers as unpackaged merchandise. Before transporting them to distant places, that is, transmitting them through a telecommunication network, it may be more convenient to prepare them into packets. This is a very brief explanation of what SIP [Italian Telephone Company] does with a new service called, appropriately, ITAPAC, abbreviation which stands for "Italy" and "packet". With ITAPAC one can send words and numbers through a special network and these are received at a chosen destination. This can be done throughout Italy, and if desired, throughout Europe and across the ocean; the system is connected with other similar ones operating over the whole world.

Explained this way it seems a trivial discovery, but the technicians assert that it isn't as easy as it sounds. In other more technologically advanced countries this system has been used by research centers, banking institutions, universities, large firms, for a least 10 years already. In Italy it is a novelty, or almost; the first transmissions were made only 12 months ago. For now, the users number to little more than a thousand courageous technological pioneers. But this system appears to have great potentials, and growth, SIP says, will be more than certain.

And this is supported by the fact that the development schedule is proceeding according to the pre-established time table: eighteen months ago an ad hoc agreement was signed between the Ministry of Posts and SIP for the inception of ITAPAC. SIP pledged to put into function an extensive network by February 28 of this year. We are approaching the deadline and this network does exist. The transmission of data packets can be effected from practically any place in Italy; the system can already satisfy the requirements of 5,000 users. But why transmit numbers and words in packets? What is the difference between sending data in a disorderly fashion and sending data that has been "packaged"?

Let's dwell on this point. There's more to data transmission than meets the eye. Not all transmissions are the same and the users know this well. One thing, for example, is to transmit data in a continuous fashion, without interruptions--numbers and words, one after the other, utilizing the full capacity of machines and network. It is something else to have the need to send information at intervals, with long pauses, discontinuously, concentrating

maybe a great quantity of characters and numbers into a predetermined time span and blanking out long minutes. It would be cumbersome to continuously interrupt the connection so as not to pay exorbitant fees, and then reopen the line when there's again need to transmit.

This may seem a small inconvenience. But it isn't for those that work constantly with numbers and words that have to be transmitted from one place in Italy to another; for someone, for example, using a computer terminal to receive or send information. But it isn't only a question of streamlining the workload. It is also a matter of savings. Up to a year ago, it was possible to transmit data only through the SIP telephone network. But, because of the way it is structured, that service is paid according to time utilized. It was a big problem for the user that sent information in a discontinuous way.

With ITAPAC, the main criterion for determining fees is the quantity of data transmitted and not the time employed in the transmission. Going back to the first example, in conclusion, one pays the carrier for the load and the transmission; the time employed is mainly the carrier's concern. There is, anyway, a substantial difference in the SIP system because, although it is true that the time criterion is almost not a factor in determining fees, the transmission of information from one place to another in the nation occurs in real time.

This aspect of savings may be better explained with an example. Let's suppose that someone in Milan needs to access a scientific data base in Rome. And let's suppose that 150 transactions occur between the two sites and that the average duration of the call is ten minutes. With the traditional system, this service could cost more than one million when we apply the fees for a Rome-Milan connection, i.e., those for the sixth subdivision of the tariff rates. With ITAPAC the cost is reduced by one fifth, about 200,000 lire. Savings are realized even when the two connected points are much closer, but obviously, the savings are not as great.

But it is also convenient for the provider of the service. Because even in the case that the line remains virtually open between the two points, effective use of the network occurs only when transmission of the packets occurs. During other times the lines are empty and can be utilized for other transmissions, fully, satisfying more users, transporting a greater data load, and therefore with greater profits.

Who can tie into ITAPAC? The system caters to very specialized users. The packeted data can be sent by using appositely named packet terminals which format words and numbers according to sequences appropriate for transmission through the network; or even from less specialized terminals, known as asynchronous to technicians, which send one character at a time. In this case specialized equipment in the network will packet the information. In any event, it is possible to connect the two types of terminals. But there's a difference: while the asynchronous ones are capable of transmission speeds from a minimum of 300 to a maximum of 1200 bits per second (eight bits are required to form a character), the packet terminals are capable of much higher speeds, from 2400 to 9600 bits per second.

Are there possibilities of errors? It seems that these are almost reduced to zero because in the network is at work a kind of monitor that warns the terminals in case of erroneous transmission, and forces them to correct themselves.

In conclusion, at SIP they say that data transmission is better by the packet.

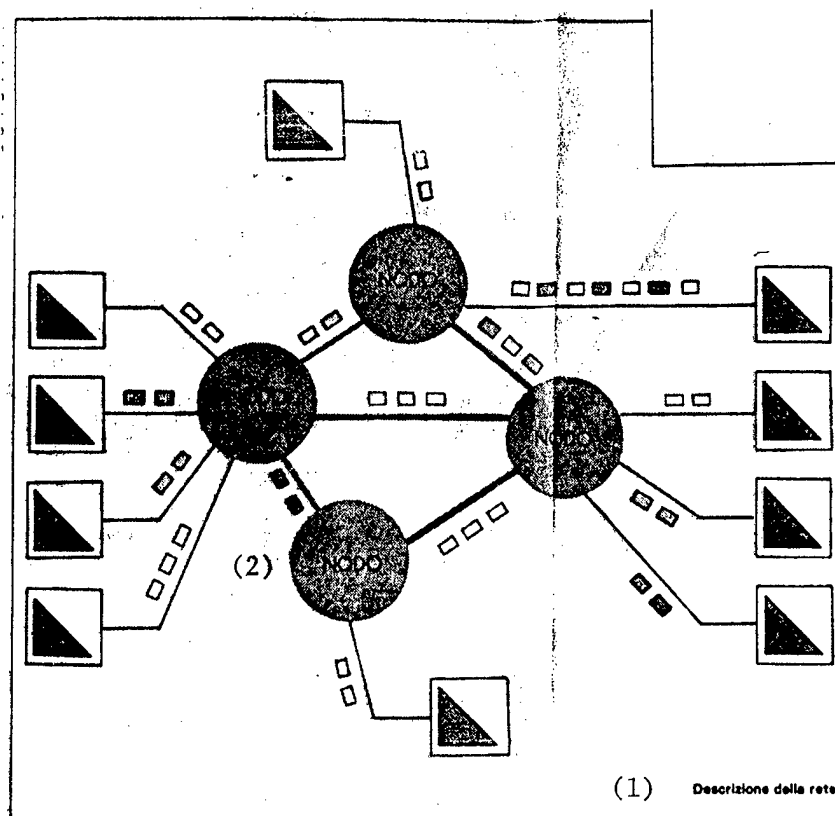


Figure 1

Key:

1. Description of the network
2. Node

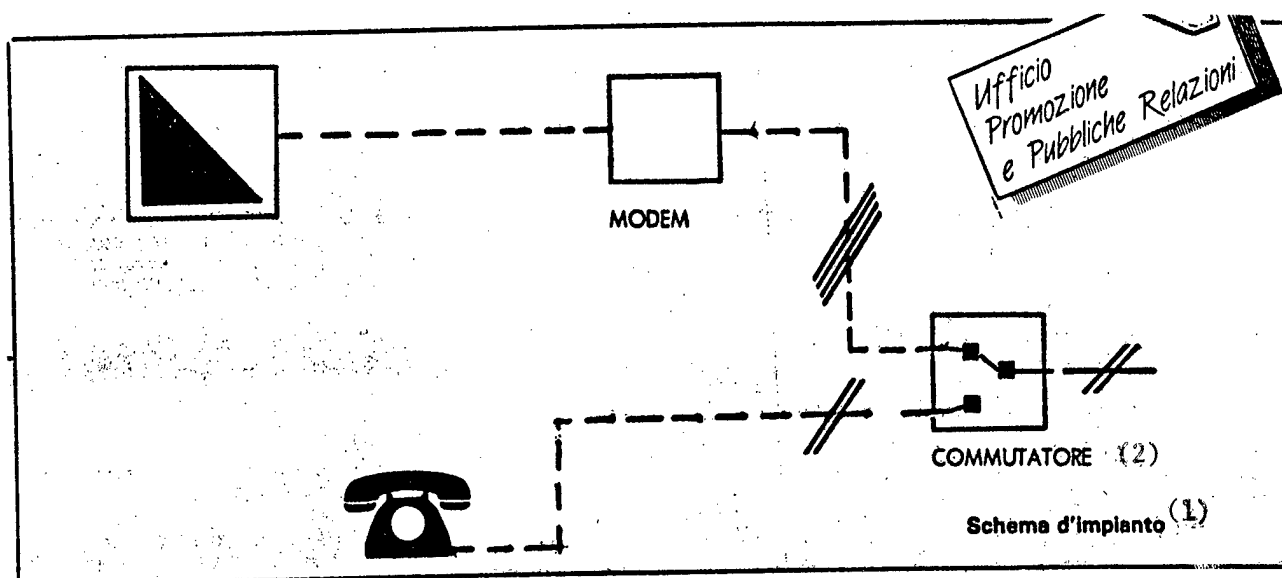


Figure 2

Key:

1. Installation design
2. Commutator

13120/12790  
CSO: 5500/2616



11 April 1986

NORWAY

## TELECOMMUNICATIONS AGENCY GENERAL DIRECTOR KJELL HOLLER

Oslo AFTENPOSTEN in Norwegian 8 Feb 86 p 10

[Article by Ole Johan Nilsen]

[Text] The name of the Telecommunications General Director is still Kjell Holler. He is now entering his second term and is happy that the Telecommunications Agency is more exciting than ever before. Before he retires, he will stand at the head of an organization that delivers an enormous stream of data. Now and then something has to go wrong, but he consoles himself here with the law of large numbers. He and the other 20,000 employees can live with a few letters to the editor each day in Oslo as long as the Telecommunications Agency manages to come to grips with over 99 percent of the errors. To avoid making mistakes, he drinks coffee in the canteen every day he can. There he finds, among other things, pleasant co-workers with good pedagogical ability. This is a big help in the data age.

AFTENPOSTEN asked him if he could imagine taking over the leadership of the national railways and bringing all the trains on schedule. Or becoming health director and putting things in order there. But he said he was happy to have the job he has. He fully understands his colleagues' problems in the Norwegian National Railways: low level of investments for many years, delays, and service problems. As for Mork and his lines of people waiting for medical treatment, Holler says he knows little about this field.

"But modern leadership principles do not seem to have come into effect in all administrative organs of the public sector," Holler added. For five years he has himself observed and hastened the development in the Telecommunications Agency from a traditional civil service style to one of modern leadership. "Such things take time," he says today.

AFTENPOSTEN: The child is the father of the man. What did the preacher's son from Rjukan learn that has been useful later in life?

Holler: At any rate I learned how to adjust to new situations. We moved a lot. Five or six times I changed my circle of friends. This makes getting to

know people easier. Or the opposite. In my case, the result was positive.

His ability to adapt must have been well developed. In the course of his working life, he has had five different jobs. After completing his studies in economics, he became a contributing editor in economics for ARBEIDERBLADET ("In Brofoss' time, when the country was led"). After this, he was in the Federation of Trade Unions and then an industrial minister in stormy years. He worked for the Samvirke Insurance Company and is now the director of the Telecommunications Agency.

"In all these positions I could use essential things from earlier jobs," he said. Information, dealing with political officials, organizational life and patterns of organizational reaction, competition, sales, and so forth." There is a wonderful story on how young Holler arrived at Jern and Met's rostrum and couldn't find room for his manuscript. When he told this to Konrad Nordahl, he received the clever answer: "That rostrum is not made in 8 by 11 size; it is made for the clenched fist."

Holler has stored this episode in his memory and uses it to illustrate the importance of oral, easily understood presentations. In the course of time he attained the reputation of being one of the few people who could speak understandably on economics. He avoids phrases like those of today's economists such as "net negative proven new balance," for example.

AFTENPOSTEN: Have you kept up with hobbies such as music, bridge, and carpentry?

Holler: Today I stick more to the piano, together with a little bridge and going to my cabin. But the music began with a ukulele. It was my first instrument, and I took it along 9 April 1940 when we moved from Horten. Later, in junior high school, I decided to make an instrument and ended with a cross between a ukulele and a guitar. The result was so good that I was excused from woodwork for the rest of the year.

Then I began with the cello and played in the Kragero Music Society. The other cellist was a doctor, and he was once called out on a case during a concert before a packed house. I had to take over a solo on a very short notice and didn't like it at all. Afterwards I asked the director how it had gone. He said that at any rate I hadn't done any damage. This was my public debut. After a while I began to play the organ for marriages and funerals, but now I play the piano.

AFTENPOSTEN: Was it easier to run the Telecommunications Agency in 1930 with 7,000 employees?

Holler: Today we have, at a rough estimate, 20,000 employees in the Telecommunications Agency. I am fond of saying that today all Norwegians know about the Telecommunications Agency and deal with it, but only a very few have any dealings with Spigerverket. We produce things in mass. This means

that according to the law of large numbers, something must go wrong. In Oslo, 200,000 errors appear on the network, and we manage to correct over 99 percent of them. Still, 1,000 errors remain -- enough for three letters to the editor every day in the newspapers. We just have to live with this.

AFTENPOSTEN: What do you think of the statisticians' predictions of a development before the year 2000 that can be more comprehensive than what we saw in the days of Newton?

Holler: The catchword, "data," releases a flood of enthusiasm. A fusion of telecommunications technology and data systems is taking place. Digitization is the thing. The first telecommunications center to use hypermodern technology nowadays is in Trondheim. In 1992, half of the telephone subscribers will have such equipment, and the Telecommunications Agency will deliver a continual stream of data with enormous capacity. But this requires much in the form of investments, training and retraining. While we keep a little of the old, we must learn to understand the new.

Holler is supported by an ambitious plan the Storting has approved and that can give us a top place in Europe in 1995 in telecommunications. "But we are an expensive country," the director added. With a sigh, he said that the Danes get along with four relay transmitters for the whole country. "Here we have 1,900 transformers that cover 99 percent of the population with TV. The remaining one percent alone requires 600 new transformers."

AFTENPOSTEN: Do you manage to keep abreast of all these new developments?

Holler: There are no basic new developments that I do not know about. But it is complicated. For example, one must intuitively understand what digitalization is. Otherwise, one simply leaves this job. I am fond of saying that I am dependent upon pleasant co-workers with good pedagogical ability.

Holler remembers an American cartoon of a man sitting alone in a skyscraper in a huge office with many machines. He imagines that this is the way it is at the top of other skyscrapers, too, and so he calls to his secretary: "Annie, can you get me in touch with somebody?"

"That's not the way it is in the Telecommunications Agency today," he said. "I am very much in touch with what is happening. I often give lectures, and I always drink coffee in the canteen."

Holler says that the new catchword is "business climate." He has an excellent example of the opposite. In the 1970s, every applicant for a telephone was a thorn in the side of the agency. As soon as a person became known as a worrisome applicant, a form was filled out on him and he was known as a bother. "We live in a completely different world today," Holler said. "Our goal is to become a more cooperative monopoly. Much is yet to be done. The process takes time."

AFTENPOSTEN: Concerning the Telecommunication Agency's struggle to be at the top of technology -- will we be able to get ahead in little Norway?

Holler: Too few people are being trained in the field of telecommunications technology. The Telecommunications Agency alone absorbs about all that are trained. But there is also an industrial need. Our biggest problem is getting and holding the necessary number of specialists. Without enough people, we will not be able to digitalize. All the authorities agree on this. We are in a continual dialogue with the consumers, the Ministry of Administration, and the Ministry of Transport and Communications on the retention of people. They show some understanding, but not enough. The classical problem is that people have children in their teens, life becomes expensive, and they go into better paid work.

Holler is satisfied with the "raw material" that comes to the department from Norwegian schools. "It has gotten better with the years. Twenty-year-olds are better and better educated, and our staff is becoming qualitatively stronger. Soon we must take over part of the school's pupils to do our own teaching and retraining."

He speaks well in the interview. He is trained in this function. But he is a little disturbed when we cite a Labor Party election notice from 1961, which stated quite broadly that bureaucracy was something completely foreign to Holler. We asked him if this was true today.

"Did it really say that?" he asked. "Well, we have enough bureaucratic red tape in our own ranks. On the other hand, it is important to have clear rules for administration. But we would like to have greater freedom of action in the Telecommunications Agency," he said somewhat wistfully.

AFTENPOSTEN: How are relations with the Norwegian Broadcasting Company?

Holler: In general, they are good. But we are a purely technical department that provides apparatus. The political authorities decide policy. As the director of the Telecommunications Agency, I am anxious that the agency not involve itself in media policy.

AFTENPOSTEN: What about the turnover in leadership in a small country? Has the rotation period become shorter with the years?

Holler: "Yes, I think so. This is confirmed, among other ways, by the regulations for length of terms in top positions. I am now entering the last of my two terms. There are enough exciting tasks. The Telecommunications Agency has never been so exciting as now," he added somewhat longingly.

Captions:

1. From traditional civil servant style to modern leadership in the Telecommunications Agency -- Kjell Holler takes a great part of the credit. Now he has been assigned the leadership position in this national "plant" for a new term.

2. "In Oslo 200,000 errors occur on the telecommunications network. We manage to correct over 99 percent of them. But 1,000 still remain -- enough for three letters to the editor a day in the papers."

9124

CSO: 8139/0835

SPAIN

# LAW GOVERNING PRIVATE TV TO REMAIN UNCHANGED

Madrid EL SOCIALISTA in Spanish 18 Jan 86 p 5

[Interview with Francisco Virseda, general director of mass media; date and place not specified; first paragraph is EL SOCIALISTA introduction]

[Text] The law that regulates private television channels will not contain technical considerations or establish the number of private channels to be conceded. However, it will establish "concession" as the legal way to have access to a private channel, with the state always having title. It will be a short, organic law with 17 articles. These facts were provided by the general director of mass media, Francisco Virseda, in the interview that follows.

[Question] Certain public leaders, interested journalists, and many of the public ask when the government will send the bill on private television to the Cortes.

[Answer] There is no set date. The only commitment made personally by the president is that a bill to regulate access by the private sector to television will be submitted to the Cortes during this legislature.

[Question] What elements is the government shuffling around in order to regulate private television?

[Answer] In order to regulate private television, it must have concrete data and an analysis of the current situation. There are technically only two telecommunications networks in Spain that could carry private television channels. One network is Television Espanola which is prepared for that and the other is Telefonica. One difference between the two is that the first is a state network; it is public. The second is not a state network although the state has 47 percent participation in Telefonica. The second difference is that Telefonica is telephony, not television. Of course, with a number of investments and adaptations, it could be used as a television network. Another consideration is that there cannot be comparisons with the United States or other countries as to the establishment of a certain model of private television. The Spanish advertising market, the basic support for private television--apart from the sale of programs which can raise funds--has very limited expansion. There is no question that when there are other television channels, there will be competition in television advertising

rates and that will generate more television advertising. However, will that be enough to meet the economic needs of all the channels, public and private? That is the question.

[Question] And the answer?

[Answer] In a limited way.

[Question] And....

[Answer] I want to draw some provisional conclusions. First, an increase in channels in Spain would make different television projects unviable. Second, considering the possibilities for the number of channels--national channels and local channels--private local channels would rarely be profitable. In other words, they would only be in very populated areas and cities: Madrid, Barcelona, Bilbao, and probably Valencia and Sevilla....Who wants private television in Badajoz or in Avila, for example? If that system of coverage were chosen--exclusively local--we would be generating first, second, and third class citizens in Spain again as far as the mass media are concerned. Therefore, it seems logical that the option would be to concede national channels.

[Question] According to this analysis, the concession of private local channels would be eliminated. What technical possibilities exist for private national channels?

[Answer] The technical possibilities are limited. In conventional broadcasts through the land network, we only have the frequency for two national channels. Spain negotiated poorly in Stockholm in 1964 at the conference to distribute television frequencies. It was assigned three broadcast frequencies. With those that Television Espanola uses and those of the autonomous channels, there is only room right now for two channels through the land network. By satellite? There are many more possibilities. Using optic fiber cable? Even more.

[Question] Is the future law going to define the number of private national television channels? Is this type of definition advisable when Spanish enterprises are participating in the construction and launching of new satellites and when cable television is just around the corner?

[Answer] The law that regulates the concession of private television channels is not going to define the number. Spain is part of two international satellites organizations: INTELSAT which is international; and EUTELSAT which covers Europe. We have a 4.6 percent share in these organizations. The signatory of these agreements, by government decision, is Telefonica. This means that Spain is part of the satellite world. Television Espanola is seen by satellite in the Canary Islands. One satellite carrier, INTELSAT V, is rented by Telefonica. Telefonica has also rented one television channel on the next EUTELSAT sent up by Arian. That rental is going to cost about 400 million pesetas per year. That is the third possibility for a private television channel.

[Question] How long will the law on private television be?

[Answer] The law will be very simple and very short. It will only regulate the basic aspects of this situation.

[Question] How many articles?

[Answer] About 17.

[Question] Will it be an organic law?

[Answer] Yes, it has to be an organic law because there have been two decisions by the Constitutional Court on private television that state very clearly that our Constitution permits private television. It must be regulated by an organic law since it involves freedom of expression.

[Question] Will there be concessions or licenses for private television?

[Answer] The legal way to obtain a private television channel will be "a concession" and not a "license." Throughout Europe, television is understood as an essential public service under the state. The way to grant that essential public service is through concession, not licenses which is the system in the United States.

[Question] What are other basic aspects of the new law?

[Answer] One of the basic conditions in order to obtain a concession for a private television channel will be to be a Spaniard. This is a basic principle that is followed for public services in all countries although there is the possibility of foreign investment in production, etc.

[Question] Does the law establish a required percentage for Spanish production? If so, what?

[Answer] It introduces the principle that there will be a minimum percentage for national production. However, the specific percentage--probably 50 percent of the programming--will not be in the law but in the decrees and regulations that develop it.

[Question] Does it contain limitations on the broadcast schedule? Will it establish a maximum amount of advertising?

[Answer] No, there will not be any limitation of the broadcast schedule. Any maximum amount of advertising per broadcast hour must be generous. I think a maximum of 14 minutes of advertising per broadcast hour has been discussed. Remember, the average amount of advertising on Television Espanola is not even 7 minutes per hour. In any case, the law will be broad enough so that it does not limit any possibility for the present or the future. It will be a basic framework, basic enough to have a future and last many years.

7717

CSO: 5500/2595



SWITZERLAND

SWISS PTT CONSIDERING VIDEOTEX, REJECTING FRENCH MINITEL

Paris ZERO UN INFORMATIQUE in French 10 Feb 86 p 46

[Article by Thierry Combe: "The Ordinance Draft on the Fire"]

[Text] Rejected repeatedly, will the Swiss Videotex soon see the light of day? At the present time, an ordinance draft attempts to satisfy everyone. During the first general assembly of the Association of Videotex Agencies and Services (AASV), which represents the professional services on the Swiss market, this draft was widely discussed.

The president of AASV, P. Klugl, opened the discussion by indicating what he considers as obstacles to the birth of the Swiss Videotex: "The demand for these Videotex services is being underestimated in Switzerland, and while no one wants to block progress, they fear it." Other negative factors: "PTT's prudent waiting policy, whose commercial policy is not always judicious. And lastly, the technology remains too complicated and generally too expensive." Responding to these arguments, R. Trachsel, director of PTT's Remote Computer Department, declared that "it is inconceivable for Switzerland to deprive itself of Videotex." The debate continued with a methodical dissection of the ordinance draft, a text which should assure a change of the present law regulating telegraph and telephone correspondence, which dates to 1922, to a new legislation which should become effective in 1991. Far from achieving unanimity among the interested parties, it provides interesting indications of the the Swiss PTT strategy about Videotex and telecommunications in general.

The first attitude is defensive, notably against the French Minitel. In the portion of its text devoted to commentaries, the ordinance draft indicates that "Teletel is not compatible with CEPT requirements." In addition, the Swiss PTT denounces "French enterprises which through aggressive publicity, seek to implant their system in Switzerland. If a public service is not soon established in Switzerland, the use of the French Minitel, compatible only with Teletel, threatens to spread in French-speaking Switzerland on a private basis; we would then have in Switzerland two parallel concurrent systems which would be incompatible with each other. It is in the national interest to prevent such a situation."

There is Danger at Home and Foreigners Have No Lessons to Teach to the Swiss PTT

In short, there is danger at home and foreigners have no lessons to teach to the Swiss PTT, which has selected the CEPT standard used by the Germans for their Bildschirmtext, "the only one suitable for our multilingual country," the draft indicates (it is true that this feature seems to be overlooked on the other side of the Sarine).

Although it denies it, the PTT wants to maintain some control on Videotex and its applications. For instance, only "data-circuit terminating equipment accepted by the PTT enterprise" can be used (Minitel was endorsed a year ago). A heavily debated point was the slowness of the ratification process for new equipment, which causes further delays.

Lastly, an extensive polemic is created by the question of private Videotex service independence, against PTT services. The draft commentaries point out that the latter "concern not only the Videotex service of the PTT enterprise, but private Videotex services as well." They go on to say: "The PTT exercises no control on information. The ordinance describes the information which is not accepted (Article 5); namely, illegal information .... which infringes on morals or public affairs, which is deceptive or has the nature of unfair competition, as well as that which includes publicity which is not perceivable as such."

As we can see, while the discussion wants to ease up, the articles of the ordinance draft are no less vague. The hesitation is even more perceptible in a statement of the consequences that would be engendered by the application of an overly strict legislation. If Switzerland does not take the initiative in research and training, stresses the ordinance draft, "the result would be an exodus of data banks and their associated knowledge. In the long term this would be harmful."

It is on 1 July that the public Videotex service will finally see the light of day, because the time has come, in Mr Klugl's words, that "after years of tests, the Videotex light change from yellow to green."

11,023

CSO: 5500/2617-A

END